

REMARKS/ARGUMENTS

In response to the Office Action mailed May 22, 2006, Applicants amend their application and request reconsideration. No claims are added or cancelled so claims 1, 2, 4-8, and 10-16 remain pending.

Renewed Request for Acknowledgement of Priority Document

The present patent application is based upon Japanese Patent Application 2000-360280, filed November 27, 2000. In the Amendment filed December 30, 2004, Applicants requested acknowledgement of receipt of the certified copy of that Japanese patent application, i.e., the priority document, filed in order to claim priority pursuant to 35 USC 119. The request for acknowledgement of the priority claim and receipt of the certified copy was not responded to in the Office Action mailed September 30, 2005.

In the Amendment filed February 22, 2006, the Applicants, at page 9, renewed their request for acknowledgement of the priority claim and of receipt of the priority document. Again, the Office Action mailed May 22, 2006 failed to respond to the request either in the PTOL-326 form in section 12 or elsewhere.

Applicants again, respectfully request acknowledgement of the priority claim and receipt of the priority document. Applicants' representative confirmed that the certified copy of the priority patent application appears in the image file wrapper with a filing date of April 25, 2001 and is identified as "Foreign Priority Papers Filed". The document is 71 pages in the image file wrapper because the U.S. Patent and Trademark Office has inserted, for non-apparent reasons, a cover page that is page 1 of the document.

Drawing Objections

The drawings were objected to as not showing the "detecting unit" referred to in the examined claims. As discussed below in connection with one of the rejections,

the claims have been amended so that the term “detecting unit” no longer appears in any claim. Therefore, the drawing objection is moot and does not require further response.

Rejections Pursuant to 35 USC 112, First Paragraph

All of the pending claims, except claims 15 and 16, were rejected as not supported by the application as filed as required by the written description requirement of 35 USC 112, first paragraph. More specifically, claims 1 and 7 were rejected as using the term “correcting unit” but the Examiner could not find that term within the specification. In response to this rejection, claims 1 and 7 have been amended. In addition, dependent claims, not cited by the Examiner but also including the same term, have been amended, consistent with the original disclosure, so that the term “correcting unit” no longer appears in any claim.

Claim 1 and its dependent claims are amended by referring to the correcting unit as a “timer synchronous unit”. This amendment is supported by Figure 3 of the patent application and the description on page 23, in lines 7-19. That description shows that the function performed, according to claim 1, by the “correcting unit” is actually performed by the “timer synchronous unit” with respect to elements that are shown in the figures of the patent application. While there is no requirement in U.S. law of verbatim agreement between claims and disclosure, as seems to be required here, the amendments provide the desired verbatim agreement and therefore overcome the rejection with respect to claim 1 and uncited claims 4-6.

A different amendment is made with respect to claim 7 and its dependent claims. It is apparent from the patent application, in the passage from page 31, line 7 through page 32, line 6, that the comparing unit provides not only the function described in the former penultimate paragraph of claim 7, but also the function of the “correcting unit” that was referred to in the former final paragraph of claim 7. Those two paragraphs have been combined to describe both functions of the “comparing unit”. Thus, the amendment of claim 7 provides verbatim agreement between the

term “comparing unit” in the claims and the specification. Similar amendments are made to dependent claims 10-14, although those claims were not cited by number in the rejection with respect to the term “correcting unit”.

Claims 6 and 13 were rejected because the Examiner found no description in the specification or in the drawings of a “detecting unit”. The recitation of a “detecting unit” is unnecessary because the function described for that unit is described in the patent application as a function of the timer synchronous unit. Therefore, claims 10 (not cited in the Office Action) and 13 have been amended. Support for the amendment is found at pages 29 and 30 of the patent application with respect to claim 6 and pages 42-44 of the patent application with respect to claims 10 and 13.

Claims 7 and 15 were likewise rejected as not supported by the application as filed in terms of enabling one of skill in the art to practice the invention. The functions recited in those claims for the first global timer, and for the second global timer in claim 15, were cited as not enabled. While the rejection seems to be an issue of semantics rather than substance, claims 7 and 15 have been amended to eliminate reference to the control provided, as between the controller and the devices controlled, with respect to the first global timer of claim 7 and the first and second global timers of claim 15. Other parts of the claim explain clearly the interaction between the global timers so that the deleted language appears to have been surplusage.

These claim amendments dispose of the drawing objection as well as the rejections pursuant to 35 USC 112, first paragraph. In addition to these amendments, an uncited error in claim 1 is corrected, a redundancy is removed from claim 7, and punctuation is improved in claim 13. No claim is substantively amended.

Prior Art Rejections

Although the Examiner characterized the rejection as new, the same publications were relied upon in making the present prior art rejections as in the previous rejections. In the first of the prior art rejections, claims 1, 2, 4-8, and 10-14

were rejected as unpatentable over Voth (U.S. Patent 6,351,821) in view of Strong et al. (U.S. Patent 5,689,688, hereinafter Strong). This rejection is respectfully traversed.

While a lengthy response to the first of the prior art rejections could be supplied, emphasizing many detailed differences between the invention and the asserted combination of Voth and Strong, in order to advance the prosecution in the simplest way, Applicants point out that no combination of Voth and Strong could include all of the elements of the rejected independent claims 1 and 7. Accordingly, *prima facie* obviousness cannot be established with respect to any of the initially rejected claims based upon the prior art applied. Applicants reserve the right to supply additional arguments, as may be necessary, with respect to other claims at a later time.

The invention, as understood from both sides, based upon the previous communications, concerns a system that provides time synchronization of clocks within controlled devices by a clock within a controller. In the invention as defined by amended claim 1, that controller includes a global timer and each of the controlled devices includes a respective global timer controlled through a network that interconnects the controller and the controlled devices. In addition, each of the controlled devices includes an operation period timer that controls an operation period of the device itself. In other words, this operation period timer is a conventional clock that synchronizes operations within the device itself. Thus, each controlled device includes two clocks, a respective global timer, and the operation period timer. Of course, each controlled device according to claim 1 includes a timer synchronous unit which corrects the operation period time of the respective controlled device and carries out synchronization between the global time of the global timers of the controlled devices, for each controlled device.

Voth describes a computer network with a number of identical terminals or nodes. One of those terminals is designated a master terminal and controls the other terminals as slave terminals and provides synchronization of timing. The structure of

each of the master and slave nodes is illustrated in Figure 2 of Voth and each such terminal includes a single time clock 212. There is no suggestion anywhere within Voth of the presence of a second timer that could correspond to one of the global timer or the operation period timer of the system of claim 1 and its dependent claims 2 and 4-6. In fact, it would appear that the timer 212 of each node in Voth corresponds to the operation period timer of claim 1 so that no global timer is present within each of the controlled devices, i.e., slave nodes, to meet claim 1.

Strong, like Voth, also concerns synchronizing slave nodes with respect to a master node. Like Voth, there is no description in Strong that any of the controlled devices, i.e., the slave nodes, includes two separate timers that could correspond to the global timer and the operation period timer of the controlled devices of claim 1 and its dependent claims. In fact, it does not seem that Strong was even cited with respect to any element of claim 1 but rather was cited for the time stamp feature of claim 7. Therefore, since neither Strong nor Voth describes controlled devices respectively including two separate timers, no combination of those two patents can establish *prima facie* obviousness of any of claims 1, 2, and 4-6. The fundamental requirement of establishing *prima facie* obviousness is a demonstration that all of the elements of the claimed invention are present in the prior art publications applied in rejecting the claims. Since that requirement has not been met here, the rejection should be withdrawn.

As a further note with respect to the rejection of claims 1, 2, and 4-6, Applicants have been required, again, to infer what the Examiner intended in rejecting those claims. While the Examiner provided detailed comments concerning the rejection of at least claims 7, 8, and 10-14, there are no comments of any kind in this or the previous Office Actions with respect to the prior art rejection of claims 1, 2, and 4-6. Rather, after explaining the basis of the rejection of claim 7 and its dependent claims, the Examiner merely stated that claim 1 and its dependent claims were rejected on the same basis as the rejection of claim 7 and its dependent claims. While such a position could be understood if claim 1 were, for example, a sub-set of claim 7,

there is no such relationship here. Claims 1 and 7 are substantially different and Applicants respectfully suggest for a second time that the failure to provide detailed comments explaining the basis of the rejection of claim 1 and its dependent claims is improper examination procedure and deprives the Applicants of a proper opportunity to reply to whatever reasoning might support the rejection. Moreover, by the payment of the initial filing fee and of the fee necessary to establish an RCE, Applicants believe they have paid for and are entitled to a complete examination of all pending claims. In fact, if claim 1 and its dependent claims are not allowed, Applicant should be given an additional opportunity, without the burden of a final rejection, to respond to whatever the basis of the rejection of claim 1, as explained in detail, might be.

The system according to claim 7, the second pending independent claim, likewise includes a controller having a first global timer, as in the system of claim 1. In addition, however, that controller includes a second timer, a control period timer. The control period timer functions like the conventional timer of a computer or other electronic device that requires internal synchronization. Further, the controller according to claim 7 includes a time stamp providing unit and other features. As in the system according to claim 1, each of the controlled devices in the system according to claim 7 includes a respective global timer and an operation period timer, in addition to other elements. In other words, with respect to the number of internal timers, the controlled devices of claim 1 and claim 7 are the same. With respect to the controller, the controller of claim 7 likewise includes two separate timers whereas claim 1 only requires a controller to have a single timer.

For the same reasons presented with regard to the rejection of claim 1, it is even more apparent that no combination of Voth and Strong could include all of the elements of the system of claim 7. Further, because there is no description nor suggestion in either of Voth or Strong that the controller include two separate timers, claim 7, and its dependent claims 8 and 10-14, even more clearly distinguish from the asserted combination of Voth and Strong than does claim 1. Upon reconsideration those claims 7, 8, and 10-14 should be allowed.

In the second prior art rejection, claims 15 and 16 were rejected as unpatentable over Voth in view of what is asserted to be “well known in the art”. This rejection is respectfully traversed.

Claim 15, which encompasses the embodiment illustrated in Figure 21 of the patent application, describes a system with a single controller that provides synchronous control of multiple controlled devices that are connected through respective first and second networks to the controller. The controller of claim 15 is not simply an amalgamation of two controllers as described in either of claims 1 and 7. There is, as shown in the embodiment of Figure 1 and as described in claim 15, a certain symmetry and a repetition of some elements of the controllers of claims 1 and 7. However, there are common elements within the controller that are not provided individually for the respective controlled devices, for example, as shown in the embodiment of Figure 21.

As best understood, the rejection is based upon a supposition that the claimed invention is no more than a combination into a single controller of two master nodes as described by Voth, without the achievement of any different function. This assertion is incorrect for several reasons.

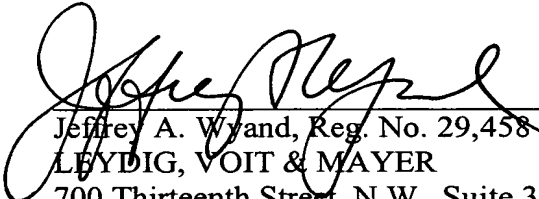
Assuming, contrary to logic, that one of skill in the art might make a totally redundant master node from two nodes as described by Voth, the resulting master node would include two of the timers 212. By contrast, the controller according to claim 15 includes three timers, two global timers and a common control period timer. Such a structure would not result from the hypothetical modification of Voth. Voth never suggests that modification, and would never make that modification because no advantage would be achieved. Moreover, Voth never describes providing a master node controlling slave nodes in more than one network. In the system according to claims 15 and 16, the controller controls devices that are connected to respective networks, two such networks in the example of Figure 21.

In summary, claims 15 and 16 cannot be obvious in view of Voth based upon multiplying the units of Voth, because the multiplication hypothesized would not

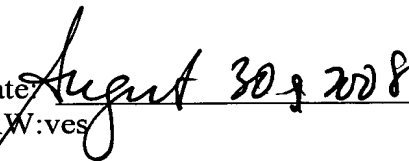
produce a controller having the structure of the controller described in claim 15. Stated another way, *prima facie* obviousness has not been demonstrated with respect to claims 15 and 16, just as it has not been demonstrated with respect to any other pending claim, because all of the elements of the invention as defined by the claims are not present in any potential combination or in any reasonable modification of the prior art.

For the foregoing reasons, upon reconsideration, the rejections should be withdrawn as to all pending claims and those claims should be allowed.

Respectfully submitted,


Jeffrey A. Wyand, Reg. No. 29,458
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date
JAW:ves


August 30, 2008